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STRENGTHENING THE COMMITMENTS IN ARTICLE 4.2(A) AND (B)

POLICIES AND MEASURES

Synthesized list of policies and measures identified by Annex I Parties in their national communications *

Note by the secretariat

1. At its first session, the Ad Hoc Group on the Berlin Mandate (AGBM) requested the secretariat to prepare for consideration at the second session "a synthesized listing of policies and measures, also by sector, identified in the national communications of Annex I Parties" (FCCC/AGBM/1995/2, para. 19 (h) (iv)). This synthesized list is found in the annex to this note.

2. The synthesized list has been prepared on the basis of an examination of 27 national communications submitted by Annex I Parties as at 2 October 1995 (see appendix for a list of these Parties). Well over 1,000 policies and measures are described in these national communications; in order to reduce repetition, where these vary only slightly, they have been included as a single measure. While this has reduced the amount of detail provided on these initiatives, the list nevertheless preserves a sense of the range of policies and measures reported by Annex I Parties.

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* The term "national communications" includes communications from the regional economic integration organization included in Annex I to the Convention.

3. It should also be noted that the secretariat did not seek supplementary information from Parties on policies and measures reported, even though they are often described at very different levels of detail in the communications. As a result, some policies and measures may not have been placed in the correct categories of the synthesized list and some policies and measures for which little information was provided may not be included in the list. Information from the in-depth reviews has been included to the extent possible.

4. Finally, the list attempts to cover policies and measures which have either been implemented or for which implementation is planned. Policies and measures that are clearly only under study at this time have been excluded.

5. The synthesized list has been structured in a manner consistent with the earlier document "Compilation and synthesis of national communications from Annex I Parties" (A/AC.237/81). Accordingly, the list has been categorized under the following sector headings:

I. Energy and transformation industries
II. Industry
III. Residential, commercial and institutional
IV. Transportation
V. Industrial processes
VI. Agriculture
VII. Land use change and forestry
VIII. Waste management and sewage treatment
IX. Cross-sectoral economic instruments

6. Under each sector heading, a number of subheadings are provided that describe areas of opportunity or overall policy objectives for greenhouse gas emission reductions. Policies and measures that Annex I Parties have reported on with respect to the exploitation of these opportunities are listed under these subheadings and are further categorized by the policy instrument used:

- regulations and guidelines
- economic instruments and incentives
- voluntary agreements and actions
- information, education and training
- research, development and demonstration

The secretariat believes that this approach has the merit of providing a greater breadth of description. At the same time, however, it leads to repetition of policies and measures under different categories and subheadings.

7. The synthesized list also attempts to provide an indication of the number of Annex I Parties that reported on a specific policy or measure in their national communication. The following annotation system has been used:

¶	reported by 1-5 Annex I Parties;
¶¶	reported by 6-10 Annex I Parties;
¶¶¶	reported by 11-15 Annex I Parties;
¶¶¶¶	reported by more than 15 Annex I Parties.

It must be stressed that references to the number of Annex I Parties that have reported on specific policies and measures is illustrative and a reflection of the data available. The annotation system does not attempt to demonstrate the relative importance of different policies and measures in terms of their greenhouse gas mitigation potential.

8. While it is not proposed that this document be considered in depth at the second session, delegations may wish to use it as a tool to facilitate the discussions under relevant items of the provisional agenda, and in particular, item 3 (a).

Annex

SYNTHESIZED LIST OF POLICIES AND MEASURES

I. ENERGY AND TRANSFORMATION INDUSTRIES

A. Restructuring energy markets

Regulations and guidelines

- regulatory reform that increases competition by providing access to the grid for small and independent power producers (for example, through laws that break up producer monopolies, open up transmission and distribution networks, or provide an increased or guaranteed price for power from new producers) ¶¶¶
- regulatory reform that requires utilities to practice least-cost planning and/or integrated resource planning ¶
- regulatory reform that removes barriers to the transmission and distribution of natural gas ¶

Information, education and training

- providing information on the practice of integrated resource planning ¶

Research, development and demonstration

- research on the potential role of the international electricity trade in CO_2 reductions ¶
- research into the development of tools to facilitate least-cost planning ¶

B. Existing facilities: improving energy efficiency and reducing fugitive emissions

Regulations and guidelines

- NO_x and SO_x emission control standards for power generation facilities ¶¶¶
- regulations requiring energy efficiency improvements in power generation facilities ¶

Economic instruments and incentives

- financial support and incentives for the installation of combined heat and power generation in existing facilities (for example, subsidies for feasibility studies and construction, lower tax rate on the fuels used in cogeneration) ¶¶¶
- financial support to make energy efficiency improvements in existing facilities or to convert them to more efficient technologies (for example, coal, nuclear, hydro) ¶¶
- NO_x or SO_x emission charges ¶

Voluntary agreements and actions

- voluntary agreements to reduce flaring and venting in natural gas production ¶
- voluntary agreements to undertake energy efficiency improvements at energy supply and transformation facilities ¶
- voluntary agreement to promote and implement combined heat and power facilities ¶
- voluntary agreements to reduce NO_x and SO_x emissions ¶

Information, education and training

- providing information on combined heat and power opportunities ¶

Research, development and demonstration

- research into energy efficiency improvements in energy supply technologies (for example, clean coal, peat) ¶¶
- research on CO_2 capture and injection ¶
- research to enhance the efficiency of natural gas production ¶
- research into combined heat and power production ¶
- research on NO_x or SO_x emissions control technology ¶

C. Increasing the use of non-fossil fuel energy sources and low-carbon fossil fuels

Regulations and guidelines

- requirements that utilities produce a certain percentage of power from renewable sources ¶
- obligations to close inefficient, high-polluting power generation facilities (for example, brown coal) and replace them with low carbon or no carbon energy sources ¶
- regulations requiring the production of energy from coalmine methane ¶

- relaxation of regulatory requirements for siting renewable energy facilities ¶
- requirements to use biomass fuels as a power source in agricultural facilities ¶
- regulatory reform that removes barriers to the construction of new nuclear power plants ¶

Economic instruments and incentives

- financial incentives (for example, subsidies, tax relief, loans, removal of duties) to promote the development of new renewable energy production facilities, particularly biomass, solar and wind technologies ¶¶¶¶
- financial support for new nuclear power plant construction ¶
- financial support for new hydroelectric power plant construction ¶
- financial incentives to switch to natural gas as the energy source in existing facilities ¶
- financial support for the construction of new natural gas power generation facilities ¶
- financial support for the construction of pipelines to provide access to natural gas ¶
- financial support for the construction of new, more efficient coal-based power plants ¶

Voluntary agreements and actions

- voluntary agreements to use coal-bed methane as an energy source ¶
- voluntary agreements to use biomass as an energy source in the agriculture and forestry sectors ¶
- voluntary agreements to switch to natural gas as an energy source in existing power generation facilities ¶
- voluntary partnerships to develop and commercialize renewable energy technologies ¶

Information, education and training

- providing information on renewable energy supply technologies ¶¶

Research, development and demonstration

- research into renewable energy supply technologies, particularly biomass, solar and wind technologies ¶¶¶¶
- research into fuel cell technologies ¶
- research into nuclear energy technologies ¶
- research into converting coalmine methane into energy ¶

D. Energy transmission and distribution

Regulations and guidelines

- regulations promoting more effective monitoring, maintenance and repair of natural gas pipelines ¶¶
- regulated distribution transformer standards ¶
- regulations to optimize use of transmission lines ¶

Economic instruments and incentives

- financial incentives (for example, subsidies) to promote the adoption of district heating within groups of existing buildings ¶¶
- financial support for upgrading transmission lines ¶
- financial support for repairing natural gas pipelines ¶

Voluntary agreements and actions

- voluntary agreements to reduce natural gas leakage from pipelines ¶
- voluntary agreements to implement more efficient distribution transformers ¶
- voluntary commitments to install more efficient new transmission lines ¶

Information, education and training

- providing information on district heating opportunities ¶

Research, development and demonstration

- district heating and cooling research ¶
- reducing fugitive natural gas emissions from pipelines ¶
- research to improve electricity distribution ¶

II. INDUSTRY

Regulations and guidelines

- regulated minimum energy efficiency standards for industrial equipment ¶¶¶
- regulated emission standards for equipment (for example, boilers), products (for example, storage of petroleum products) and processes (cleaning with solvents, waste incineration) ¶¶¶
- regulated standards for energy management firms ¶

- requirements to monitor and report on energy use by industry ¶
- regulated standards for energy management firms ¶
- regulated emission standards for waste incineration plants ¶

Economic instruments and incentives

- financial incentives (subsidies, tax relief, low interest loans) for investments in energy-efficient or renewable energy technologies ¶¶¶¶
- financial assistance for industrial energy audits ¶¶
- taxes targeted specifically at industrial energy use or emissions ¶
- economic incentives (for example, "golden carrot" or subsidy programmes) for the development and commercialization of energy-efficient technologies ¶
- electricity pricing reform (for example, prices increase with the quantity used or the time of use) to promote energy efficiency ¶
- financial support for the purchase of emission control technologies ¶
- financial incentives (for example, subsidies, tax relief) to encourage fuel switching from coal, electricity or oil to natural gas ¶

Voluntary agreements and actions

- voluntary commitments by industry or voluntary agreements with industry to report on energy use and improve energy efficiency (for example, industry simply agrees to take action, industry agrees to meet a specific energy efficiency or emission reduction target, or industry agrees to implement all energy efficiency actions that have a specific payback period) ¶¶¶
- voluntary commitments by industry to improve the energy efficiency of their motors, lighting or other specific energy using equipment ¶
- voluntary commitments to switch from existing equipment to more energy-efficient natural gas equipment ¶

Information, education and training

- providing information on energy efficiency opportunities in industry ¶¶¶
- provision of audits of industrial management energy use and the training of industrial energy managers ¶¶
- industrial equipment energy efficiency labelling ¶
- promoting a switch to more energy-efficient natural gas equipment ¶
- promoting renewable energy technologies ¶
- promoting emission control technologies ¶
- promoting electric heating ¶

Research, development and demonstration

- research and demonstration projects on energy management, energy efficiency improvements and renewable energy technologies in the industrial sector ¶¶¶

III. RESIDENTIAL, COMMERCIAL AND INSTITUTIONAL

A. Improving the energy efficiency of new buildings

Regulations and guidelines

- strengthening the energy efficiency and renewable energy content provisions of building codes for the construction of new buildings ¶¶¶¶
- requiring metering of water and space heating on an individual unit basis ¶¶
- obligations to plant trees around new buildings ¶

Economic instruments and incentives

- financial incentives to design and construct more energy-efficient buildings ¶¶
- financial incentives to purchase more energy-efficient buildings through the provision of "energy-efficient" mortgages and loans ¶

Information, education and training

- energy efficiency rating systems for new buildings or methodologies to make the calculation ¶
- education and training to increase the incorporation of energy efficiency considerations and renewable energy sources in building design ¶

Research, development and demonstration

- research into technologies that will improve the energy efficiency of buildings ¶¶
- demonstration projects for energy-efficient buildings and buildings that use renewable energy technologies ¶¶¶

B. Improving the energy efficiency of existing buildings

Regulations and guidelines

- commitments by Governments to undertake energy efficiency retrofits of government buildings ¶¶
- requiring metering of water and space heating on an individual unit basis ¶¶
- regulated energy efficiency standards for building retrofits ¶
- changing to daylight saving time to minimize heating and cooling needs ¶
- ban on conversion to electric heating when alternatives are available ¶
- requirement to monitor and report on energy use in large buildings ¶
- requirement to produce energy efficiency plans in order to receive a permit for a building retrofit ¶

Economic instruments and incentives

- financial incentives (for example, subsidies/loans/tax relief) for energy efficiency retrofits in existing buildings ¶¶¶
- tax increases specifically targeted at energy use by households ¶
- financial incentives for fuel switching from coal to gas, oil or district heating ¶
- financial support for home energy audits ¶
- financial support for energy efficiency improvements in social housing ¶

Voluntary agreements and actions

- voluntary agreements to seek out energy efficiency opportunities and implement energy efficiency retrofits in existing buildings ¶¶
- voluntary planting of trees around existing buildings ¶

Information, education and training

- public education on energy efficiency opportunities in existing buildings ¶¶¶
- networks of energy efficiency consulting and information centres ¶¶
- provision of energy audits for existing buildings ¶¶
- promotion of electric heating ¶

C. Improving the energy efficiency of appliances and equipment

Regulations and guidelines

- minimum energy efficiency standards for appliances and equipment ¶¶¶¶

Economic instruments and incentives

- subsidies and other financial incentives (lowering the tax rate) for the purchase and installation of energy-efficient and/or renewable energy equipment and appliances (in some cases, subsidies for the removal of inefficient appliances and equipment are also provided) ¶¶¶¶
- financial incentives to develop more energy-efficient equipment and appliances (for example, "golden carrot" programmes) or financial support for the commercialization of energy saving technologies ¶
- tax increases specifically targeted at energy use by households ¶
- financial incentives (for example, subsidies, tax relief) to encourage the replacement of existing equipment and appliances with natural gas products ¶
- electricity pricing reform (for example, price variability depending on the quantity used and the time of use) to promote energy efficiency ¶

Voluntary agreements and actions

- procurement policies that focus on energy-efficient equipment and appliances and voluntary agreements that create a market for these technologies ¶
- voluntary commitments to replace existing equipment and appliances with natural gas products ¶

Information, education and training

- energy efficiency labelling for appliances and equipment ¶¶¶
- promoting the replacement of existing equipment and appliances with natural gas products ¶
- promoting renewable energy technologies ¶
- promoting electrical heating ¶

IV. TRANSPORTATION

A. Improving automobile fuel efficiency

Regulations and guidelines

- reducing speed limits or strengthening their enforcement ¶¶
- regulated fuel efficiency standards for new automobiles ¶
- compulsory fuel efficiency standards for corporate and institutiona! automobile fleets ¶
- compulsory installation of speed limitation devices for trucks and buses ¶

Economic instruments and incentives

- increased taxation of gasoline and/or diesel fuels ¶¶¶
- financial incentives to purchase less powerful, fuel-efficient vehicles that are applied at registration, purchase or when obtaining insurance for an automobile ¶¶
- financial incentives to help commercialize technologies that will reduce fuel consumption in automobiles ¶

Voluntary agreements and actions

- voluntary agreements on fuel efficiency standards for new automobiles ¶
- voluntary agreements to use fuel-efficient vehicles in corporate automobile fleets ¶

Information, education and training

- providing information to consumers on fuel-efficient automobiles and fuel-efficient driving practices ¶¶¶
- vehicle fuel efficiency labelling programmes ¶
- tyre fuel efficiency labelling programme ¶
- fuel efficiency indicators in automobiles ¶

Research, development and demonstration

- research to improve automobile fuel efficiency ¶

B. Increasing the use of alternative transportation fuels

Regulations and guidelines

- regulations requiring the use of alternative fuels in specific applications/geographic areas ¶

Economic instruments and incentives

- increased taxation of gasoline and/or diesel fuels ¶¶¶
- financial incentives to purchase alterative fuels (for example, lower taxation than on conventional fuels) ¶¶
- financial support for the purchase of alternative fuel vehicles (for example, electric, natural gas) ¶
- financial support to produce alternative fuels ¶
- financial support to develop an infrastructure for alternative fuel vehicles ¶

Voluntary agreements and actions

- voluntary agreements with companies to use alternative fuel vehicles in automobile fleets ¶

Information, education and training

- providing information on alternative transportation fuels ¶

Research, development and demonstration

- research into alternative transportation fuels ¶¶

C. Strengthening vehicle emission controls

Regulations and guidelines

- regulated vehicle emission standards and requirements for the use of catalytic converters ¶¶¶
- compulsory vehicle inspection and maintenance programmes for some categories of vehicle or for all vehicles ¶¶

Economic instruments and incentives

- subsidies to scrap old vehicles ¶
- financial incentives (for example, subsidies, tax relief) to purchase less polluting vehicles ¶
- financial incentives (for example, subsidies, tax relief) to purchase pollution control equipment ¶
- financial support for the electrification of rail traffic ¶

Voluntary agreements and actions

- voluntary agreements to use low emission vehicles in corporate automobile fleets ¶

Research, development and demonstration

- research to improve emission control technologies ¶
- research to reduce pollution from air transport ¶

D. Increasing the use of alternative modes of transportation

Regulations and guidelines

- privatization of the railway network ¶

Economic instruments and incentives

- increased taxation of gasoline and/or diesel fuels ¶¶¶
- financial support for upgrading/expanding public transport both within and between cities (particularly rail networks) ¶¶¶
- financial incentives to use public transport or the removal of financial incentives promoting the use of the automobile (for example, ensuring tax policy favours public transport over private automobiles) ¶¶
- financial support (for example, subsidies, removal of taxes on fuels) for demonstration projects in public transport ¶
- financial incentives (for example, tax treatment) to invest in public transportation ¶
- financial support for pedestrian and cycle paths ¶

Voluntary agreements and actions

- voluntary agreements by institutions to implement telecommuting ¶

Information, education and training

- public education on the environmental impacts of the car and the promotion of alternative modes of transportation ¶

Research, development and demonstration

- research into alternative transportation technologies ¶

E. Increasing the efficiency of freight transportation

Regulations and guidelines

- restrictions on road freight transportation or regulations that increase access to or require the use of other modes of freight transportation (intermodal transport) ¶¶
- regulated fuel efficiency standards for ships ¶

Economic instruments and incentives

- increased taxation of gasoline and/or diesel fuels ¶¶¶
- financial incentives to improve freight transport efficiency by encouraging a move from road to rail transport or the use of intermodal transport (for example, changing the relative taxation of road and rail transport, financial support for the purchase of intermodal equipment) ¶¶
- financial support for the construction of intermodal freight transportation hubs and/or distribution centres ¶
- increased taxation of aviation fuels ¶

Voluntary agreements and actions

- voluntary agreements by companies to improve freight transportation efficiency ¶

Information, education and training

- promotion of alternatives to freight transport by road ¶
- training on fuel-efficient driving practices for truckers ¶

Research, development and demonstration

- research on energy efficiency improvements in freight transportation and intermodal transport ¶

F. Improving transportation and urban land use planning

Regulations and guidelines

- regulations to improve transportation efficiency and traffic flow at the local level (for example, implementing bus only lanes, more efficient traffic signals, requirements to design more compact urban communities) ¶¶¶
- regulations restricting automobile use (for example, car-free zones, limiting parking spaces and stricter enforcement of measures to control illegal parking) ¶

Economic instruments and incentives

- financial support to improve road infrastructure ¶¶
- road pricing ¶

Voluntary agreements and actions

- voluntary agreements to control international road traffic ¶

Information, education and training

- providing information to local authorities on transportation planning ¶
- providing drivers with information on traffic congestion ¶

Research, development and demonstration

- traffic management technologies and practices ¶

V. INDUSTRIAL PROCESSES

Regulations and guidelines

- regulations to reduce emissions from HCFC manufacture ¶
- regulations restricting the production of high GWP HFCs ¶
- regulations restricting N_2O emissions from adipic acid and nitric acid production ¶

Voluntary agreements and actions

- voluntary agreements to control HFC emissions in HCFC production ¶
- voluntary agreements to control PFC emissions from aluminium smelters ¶
- voluntary agreements to reduce CO_2 emissions from cement manufacturing processes ¶
- voluntary agreement to reduce N_2O emissions from adipic acid production ¶

Research, development and demonstration

- research on the reduction of PFC emissions from aluminium production practices ¶
- research on methods to reduce N_2O emissions from industrial processes ¶
- research on methods to recycle CO emissions within the production process ¶

VI. AGRICULTURE

A. Reducing emissions from enteric fermentation in animals

Regulations and guidelines

- regulations to reduce and/or limit livestock numbers ¶

Economic instruments and incentives

- financial incentives (for example, subsidies or subsidy removal) to reduce and/or limit livestock numbers ¶

Information, education and training

- education to improve the efficiency of animal product production ¶
- education on improved animal feeding practices ¶

Research, development and demonstration

- research into animal digestive processes and improved animal feeding practices ¶

B. Reducing emissions from animal wastes in agriculture

Regulations and guidelines

- regulations to reduce and/or limit livestock numbers ¶
- regulations requiring the use of animal waste as a fuel ¶
- regulations on the management of animal wastes that minimize methane emissions ¶

Economic instruments and incentives

- financial incentives to reduce and/or limit animal production or livestock numbers (for example, subsidies or subsidy removal) ¶
- financial incentives to reduce emissions from animal manure ¶
- financial incentives to use animal waste as a fuel ¶

Voluntary agreements and actions

- voluntary agreements to improve animal waste management practices ¶

Information, education and training

- education to improve the efficiency of animal product production ¶
- education on alternative and/or improved animal waste processing systems ¶
- education on the use of animal waste as a fuel ¶

Research, development and demonstration

- research into improved animal waste management processes ¶¶

C. Reducing emissions from the use of nitrogen fertilizers

Regulations and guidelines

- regulations that restrict fertilizer use by setting limits on the nitrate levels in water or the amount of fertilizer that can be used per hectare ¶¶
- regulations requiring the setting aside of agricultural land ¶

Economic instruments and incentives

- financial incentives (for example, subsidies and subsidy removal) to set aside agricultural land or to practice less intensive agriculture ¶¶
- financial incentives to use organic farming practices ¶
- removal of subsidies for fertilizer use ¶

Voluntary agreements and actions

- voluntary agreements to improve the efficiency of fertilizer use ¶

Information, education and training

- education on efficient management of fertilizer use ¶

Research, development and demonstration

- research on how to use fertilizers more efficiently ¶
- research on how to enhance nitrogen uptake by plants ¶
- research on alternatives to nitrogen-based fertilizers ¶

D. Enhancing carbon dioxide sequestration and retention in agricultural soils

Regulations and guidelines

- regulations that require improved tillage practices and soil management ¶
- regulations requiring reduced fallow frequency ¶

Economic instruments and incentives

- financial incentives (for example, subsidies and subsidy removal) to practice less intensive agriculture ¶¶
- financial support for soil management initiatives ¶
- financial incentives to reduce fallow frequency ¶¶

Voluntary agreements and actions

- voluntary agreements to improve soil management ¶

Information, education and training

- education on improved soil management practices ¶¶

Research, development and demonstration

- research on improved soil management practices and the link between soils and greenhouse gas emissions ¶¶

E. Reducing methane emissions from rice production

Research and development

- research into farming practices that would reduce methane emissions ¶

VII. LAND USE CHANGE AND FORESTRY

A. Preserving biomass

Regulations and guidelines

- regulations on proper forest management practices or regulations that require the approval of forest management plans ¶
- regulations establishing protected areas ¶
- regulations that limit the clearing of forested land ¶
- regulations that require the restoration of wetlands ¶

Economic instruments and incentives

- financial support to develop forest management plans and financial incentives for improved forest management ¶¶
- financial incentives (for example, fees for the removal of trees) to preserve forests on private land ¶
- financial support for fighting forest fires ¶

Voluntary agreements and actions

- voluntary agreements to improve forest management practices ¶

Information, education and training

- education and/or training on improved forest management ¶
- promoting carbon sequestration through a greater use of wood products ¶

Research, development and demonstration

- research on improving forest management practices ¶
- research on studying the effect of pollution on forests ¶
- research on carbon storage in wood products ¶

B. Afforestation and reforestation

Regulations and guidelines

- regulations that require afforestation of unused or abandoned agricultural land ¶
- regulations that require reforestation ¶

Economic instruments and incentives

- financial incentives (subsidies, tax incentives) for afforestation on agricultural lands, waste lands or abandoned lands and tree planting in urban areas ¶¶¶¶
- financial incentives for reforestation ¶

Voluntary agreements and actions

- voluntary agreements to rehabilitate native vegetation ¶
- voluntary tree planting partnerships and programmes ¶

Information, education and training

- education to promote afforestation ¶

Research, development and demonstration

- research on methods to maximize carbon sequestration through afforestation ¶

VIII. WASTE MANAGEMENT AND SEWAGE TREATMENT

A. Promoting recycling and minimizing waste

Regulations and guidelines

- regulations requiring waste minimization in the commercial and industrial sectors ¶¶
- regulations requiring recycling of waste in the commercial and industrial sectors ¶¶

Economic instruments and incentives

- financial incentives to reduce waste (fees on waste disposal, deposit schemes) ¶
- financial support for recycling programmes ¶

Voluntary agreements and actions

- voluntary agreements with industry to collect and recycle their products and/or packaging (for example, automobiles) ¶
- voluntary household and/or business recycling programmes ¶

Information, education and training

- education on waste reduction opportunities in residential, commercial and industrial facilities ¶
- promotion of recycling ¶
- information on wastes that can be recycled and used for energy production in industry ¶

Research, development and demonstration

- research into public attitudes towards recycling ¶
- research on improved waste management methods ¶

B. Reducing emissions from sewage treatment

Regulations and guidelines

- regulations on the production of energy from sewage wastes ¶
- regulations on treatment of sewage waste that will help minimize methane emissions ¶

Economic instruments and incentives

- financial support for the construction of more efficient sewage treatment facilities ¶

Research, development and demonstration

- research and demonstration projects on the production of energy from sewage wastes ¶

C. Reducing methane emissions from landfills

Regulations and guidelines

- regulations and guidelines that require the capture of methane from landfills for incineration or energy production ¶¶
- technical standards on the design and operation of landfills that will help reduce methane emissions ¶¶
- regulations and guidelines limiting the use of landfills as a waste disposal option ¶

Economic instruments and incentives

- financial incentives (for example, subsidies) to capture methane in landfills and produce energy ¶
- landfill waste disposal fees ¶
- financial support for composting projects ¶

Voluntary agreements and actions

- voluntary agreements to produce energy from methane in landfills ¶

Information, education and training

- promotion of composting ¶
- providing information on energy production from landfills ¶

Research, development and demonstration

- research to improve the efficiency of obtaining energy from methane in landfills ¶¶
- pilot projects to produce energy from methane in landfills or compost ¶

IX. CROSS-SECTORAL ECONOMIC INSTRUMENTS

Economic instruments and incentives

- broad-based taxes (carbon taxes, energy/CO_2 taxes, energy taxes, sales taxes with special rates for energy) to reduce greenhouse gas emissions ¶¶
- removal of subsidies for consumers and producers of fossil fuels and subsidies for producers (allowing prices to be determined by the market) ¶¶

Research, development and demonstration

- research on carbon taxes ¶

Appendix

LIST OF ANNEX I PARTIES WHOSE NATIONAL COMMUNICATIONS WERE EXAMINED FOR THIS DOCUMENT

Australia
Austria
Belgium
Canada
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Ireland
Italy
Japan
Monaco
Netherlands
New Zealand
Norway
Poland
Portugal
Romania
Spain
Sweden
Switzerland
United Kingdom
United States